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M E M O R A N D U M

TO: John Cooper, Environmental Safety

FROM: Denis Padovani, Environmental Safety, Glen Ellyn

DATE: April 15, 1988

SUBJECT: Initial Assessment of 1409 Dundee Road, Elgin, Illinois

On 4-14-88, Vince Muzzalupo and myself met with architect Roger Jadown to survey an abandoned building for possible radium contamination. An orthopedic surgeon group, Drs. Beckson and Herbson had purchased this building plus a residential property immediately east of the building. The residence is also abandoned. They intend to add a second floor to the existing structure and turn the yard and residence to the east into a parking lot. Please refer to the attached diagrams for site plan and details. Also refer to Appendix C for personnel and instrumentation information.

An internal survey of the building, with scintillators showed one small area on the south end of the building to have gamma levels of 300,000 cpm at the surface. Upon reviewing diagram A you will notice that my low energy probe indicated that the contamination followed a drain pipe for what used to be a bank of sinks. The radiation levels showed an inverted "T" pattern and Mr. Jadown confirmed that that is how the drain pipes were constructed. None of the other drains showed elevated levels. A survey of this drain area with an alpha probe showed no levels above background and a wipe test of the area showed no removable contamination. Ion chamber readings showed .1 mR/hr. As indicated earlier, there were no other areas of contamination in the floors, walls or drains of the building.

An external survey of the building and yard to the east showed a much more extensive spread of contamination. Referring to diagram B, you will find that the entire east side of the building showed elevated gamma levels with a maximum of 400,000 cpm at surface level. The yard showed eight areas of contamination with a maximum surface level of 200,000 cpm. Micro R levels are also recorded in diagram B and showed a maximum level of 150 micro R at 3 feet. The other areas of the property showed no levels above background. As of yet, the isotope(s) involved have not been determined. I will be running a spectral analysis of soil samples taken from the yard to identify those isotope(s) and their concentrations.

According to Mr. Jadown, the proposed construction of the parking lot would undoubtedly invade the areas of contamination. Building the parking lot would involve stripping the top soil off and creating a negative grade towards the center for a storm sewer. I stressed to Mr. Jadown that we needed to prevent any contamination from leaving the site, if disposal is not required. I stated to Mr. Jadown that my unofficial gut reaction was; that we would need to isolate these areas of contamination, dig them up and stockpile them in the existing parking lot and reduce the volume through sorting to limit the quantity used as backfill. When the trench for the storm sewer is dug, we could then use this material, along with the contaminated drain pipe, to fill in the lower areas of the trench. Because pea gravel is the normal backfill, this would allow a lower pressure pathway for radon and would insure no increased radon levels in the building.

Construction is ready to begin pending our recommendations. Mr. Jadown and the city of Elgin need our written approval before construction can begin.

DP:mb

cc: Bob Lommler
: Tim Runyon
: Vince Muzzalupo

Window Sill

South Wall

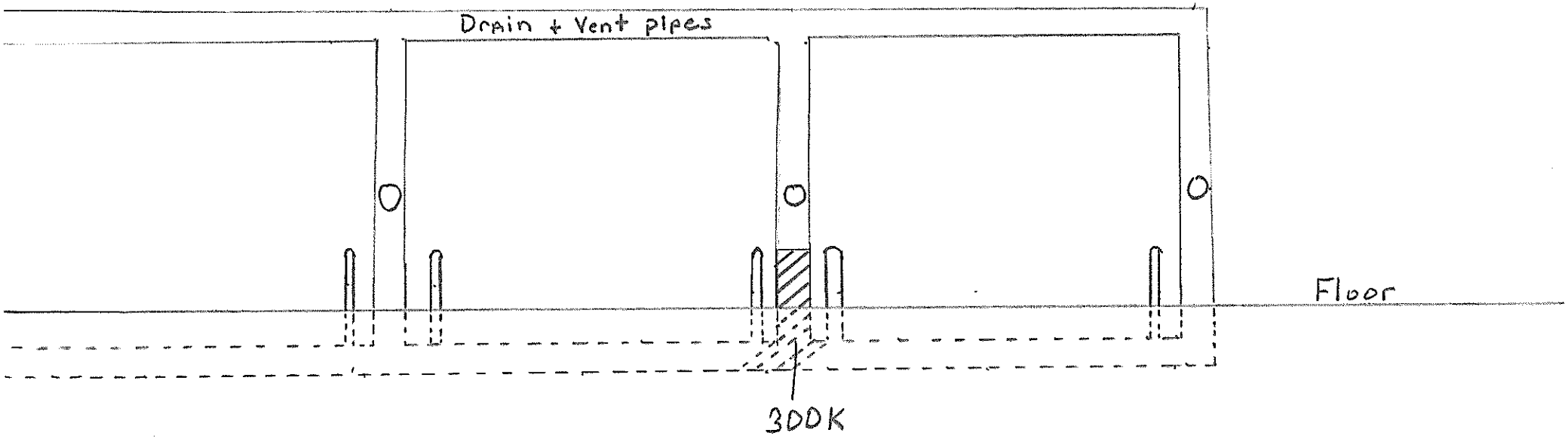

Diagram A

Dundee Rd.

1409 Dundee Rd. Elgin, IL.

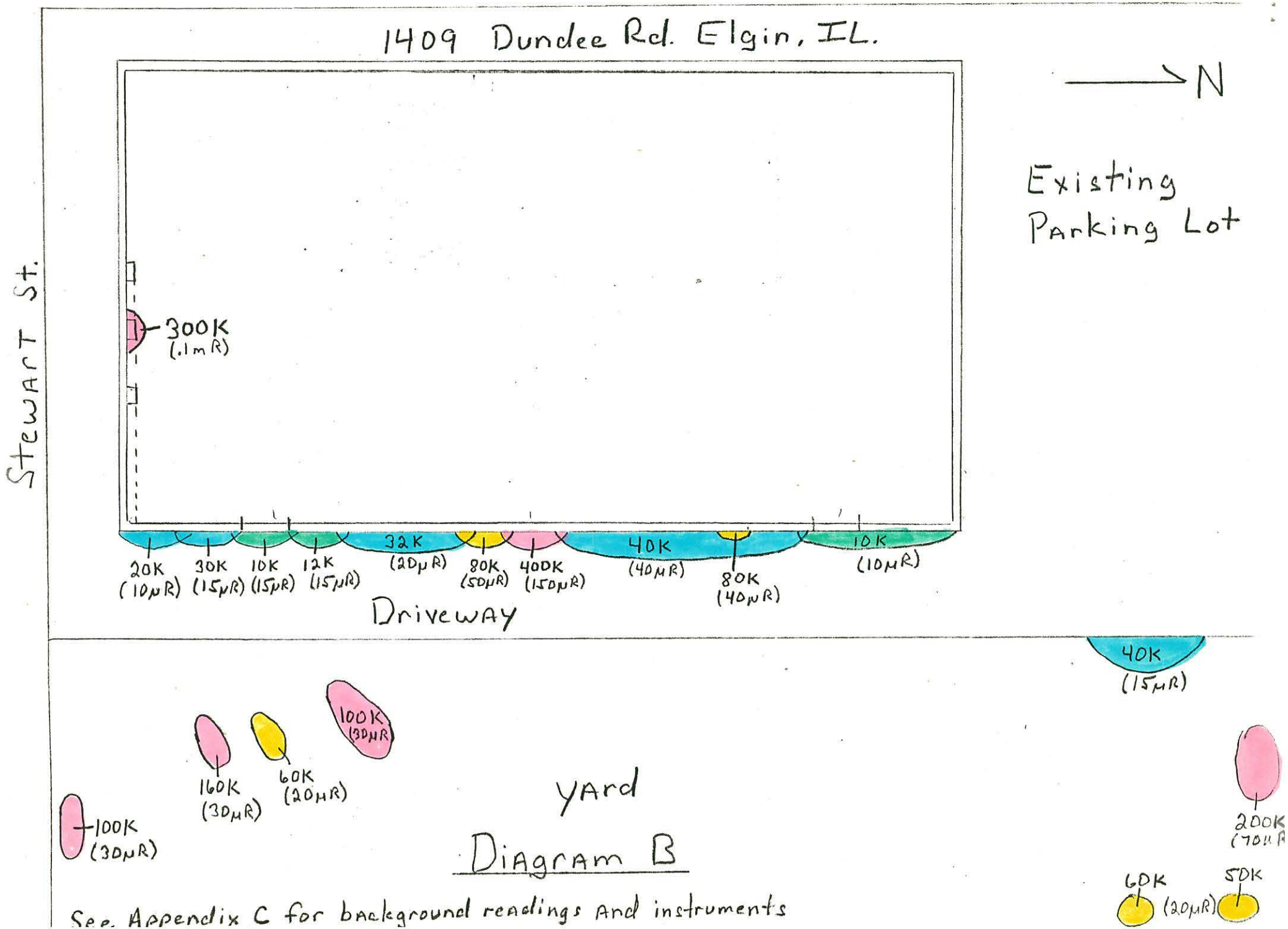

Diagram B

See Appendix C for background readings and instruments

Appendix C

Owners Associates in Orthopedic Surgery
Dr. Berkson & Dr. Herbson
Exemption 6 - PII

Architect: Roger Jadown
Exemption 6 - PII

Instruments:	Meter	Serial No.	Probe	Background
	PRM-6	560	SPA-3/AC-3	8,000 cpm/0 cpm
	PRM-6	559	SPA-3	9,000 cpm
	Ludlum 14C	40920	Low Energy Scin.	100 cpm
	RO-3	468	-	-
	Ludlum 19	47099	-	10 micro R

DP:mb